

## THE IMPACT OF TECH ON COMMUNITY: EXPLORING THE SOCIAL AND MORAL IMPLICATIONS OF DEVELOPMENT

**Ravneet Handa**

*Witty International School, Udaipur.*

[ravneeth@wittykidsindia.com](mailto:ravneeth@wittykidsindia.com)

### ABSTRACT

*The rapid advancement of technology has significant social and moral implications. As technology continues to evolve, it brings about changes in work processes, challenges established cultures, and requires new knowledge. It certainly is one of the most important components of all crises, indeed of everything that humans do. As such, it plays a major role in thinking the Unthinkable. For this reason alone, we need to address the social and Moral underpinnings of technology. The current paper aims with objectives of exploring the relationship of societal and moral considerations for educationists in the light of technology diffusion. The study uses qualitative research method. The sample size comprises 30 subjects, from the stream of educators: Professor and Teachers. The data was collected by using questionnaire method. The analysis draws on the findings of a survey conducted among Educators (Millennials) to identify what ethical requirements and tools are they aware of, how such ethical considerations can be applied at the workplace and the moral implications for the technologies they currently use. A number of important practical implications stem by the findings, which was linked to societal and moral considerations in communities can be applied as Mentors of the community. The result concludes by giving insight to become responsible enough to take charge of using and practicing technology with knowledge and right awareness, so that it creates growth and development in our daily lives.*

**Keywords:** *Tech usage, social and moral implications, ethical considerations, knowledge and awareness, community development.*

### INTRODUCTION

*“The deeper problem is the overwhelming concentration of technical, financial and moral power in the hands of people who lack the training, experience, wisdom, trustworthiness, humility, and incentives to exercise that power responsibly.” (Stephens, 2019).*

Scientists think; engineers make. Engineering is fundamentally an activity, as opposed to an intellectual discipline. The goal of science and philosophy is to know; the goal of

engineering is to do something good or useful. But even in that bare-bones description of engineering, the words good and useful have philosophical implications.

As traditional humanities disciplines adapt to the digital age, new interdisciplinary areas have emerged, giving rise to what is often referred to as the "New Humanities." This intersection between humanities and technology has led to exciting opportunities and raised important issues that require exploration and critical examination.

Questioning the moral and social issues surrounding innovation in science and technology is of paramount importance for several reasons: Innovation can exacerbate existing inequalities and disparities if not implemented thoughtfully and equitably. By questioning the moral and social issues surrounding innovation, we can address systemic biases, discrimination, and inequities in access to technology and its benefits.

Globalisation does bring many impacts on human life, and one of the effects of globalisation is the presence of technology as a result of human creativity itself, as well as forming a new culture. Technology is now inherent in every human activity and even has become part of life like a separate organ outside the human body (Wellman, 2008).

Digital technology has become an integral part of modern society. All are now exposed to digital media from a young age, and are using digital devices for socialising, learning, and entertainment. The ubiquity of digital technology has led to concerns about its impact on children's social development. Some researchers argue that digital technology can lead to decreased face-to-face interaction and a decline in social skills. Others argue that digital technology can provide new opportunities for social interaction and communication.

In terms of communication theories, a number of different frameworks have been used to explore the impact of digital technology on social interaction. Social cognitive theory, for example, suggests that impact on social behaviour of children is through observation and imitation and that digital media can have a significant impact on this process. On the other hand, social learning theory suggests the role of rewards and punishments in shaping social behaviour which can be applied to the study of online social interactions. The uses and gratifications theory suggests that people use media for specific purposes, such as socialising, and that digital media may fulfil these needs in new and different ways (Lowery, 2023).

The most important negative impacts of the use of modern technologies on society and its impact on individual behaviour are: the formation of personal beliefs, social isolation, reduction in the family ties between the family and society members, inactivity, obesity, lack of desire to work different kinetic activities, a waste of time in things that are not useful, increase in the rate of violence, especially in children because of watching violent programs, high crime rate because of spreading video clips presenting all kinds of these crimes and ways of committing them and the spread of lies and rumours causing distraction and loss of trust in such information (Younes, 2015).

## **METHOD**

This study uses qualitative method with a qualitative descriptive approach in looking at technological phenomena in the midst of community. Qualitative research is an active process that expresses logically, systematically and empirically the social phenomena that occur around to be reconstructed to reveal the truth that is beneficial to the life of society and science. The truth in question is the order that creates security, order, balance, and welfare of the community (Iskandar, 2009). According to Miles and Huberman, qualitative research is more or less analogous to the investigation process, not much different from the work of detectives who must get an overview of the particular phenomenon being investigated. Kirk and Miller define qualitative research as a particular tradition in social science that is fundamentally dependent on human observation in its own region and in contact with these people (Poerwandari, 2007; Moleng, 2000).

This study attempts to explain integrated community phenomena in society with the presence of technology that causes social change in society. This paper describes sociological arguments for existing social phenomena related to technology.

Propose qualitative research method as research procedures that produce data descriptions in the form of written words from people. The study was conducted on 30 professors and teachers from various school and colleges of Udaipur city Rajasthan. Our tool was subjected to Cronbach's Alpha test for reliability check. A value of 0.92 was obtained, which shows the high reliability of our tool (Taber, 2018).

## **RESULTS AND DISCUSSION**

This study specifically focuses on the ways educational researchers have studied implementation of educational technology and educators, adoption of technology in Indian education scenario, and the related social and moral implication on development.

Without appropriate science, technology and innovation policies, technologies, be they old or new, are unlikely to deliver progress on the global development agenda (UNCTAD, 2017). Such progress requires an environment that nurtures learning and innovation to build and manage effective innovation systems. Firms are at the core of innovation systems, which also encompass research and education systems, government, civil society and consumers (Bosamia, 2013).

Policymakers might wish to focus on the following key aspects: the capabilities of the various actors; the connections between them that facilitate exchanges and collaboration; and the enabling environment for innovation that is created (UNCTAD, 2018). In developing countries with nascent innovation systems, building endogenous innovation potential involves developing a basic capacity to learn how to adopt, assimilate, adapt and diffuse existing knowledge and technologies (UN Pub, 2018).

**Table 1: Tech advancement and its usage**

| Questions   | Parameters                        | %      |
|---|-----------------------------------|--------|
| How old are you?  | 25-34                             | 10%    |
|   | 35-44                             | 50%    |
|   | 45-55                             | 40%    |
| Which of the following technologies do you use frequently?  | Smartphone                        | 3.00%  |
|   | Tablet                            | 20.00% |
|   | Laptop/computer                   | 83.00% |
|   | Smart TV                          | 63.30% |
|   | Smart Home Devices                | 20.00% |
|   | Fitness Tracker                   | 23.3%  |
|   | Virtual Assistant                 | 10.00% |
|   | Other                             | 0.00%  |
| Which social media platforms do you use? (select all that apply)                                    | Facebook                          | 76.7%  |
|   | Instagram                         | 63.3%  |
|   | Twitter                           | 16.7%  |
|   | LinkedIn                          | 16.7%  |
|   | Snapchat                          | 10.00% |
|   | Pinterest                         | 40.00% |
|   | TikTok                            | 0.00%  |
|   | Other                             | 20%    |
| Which of the following security measures do you take when using technology? (Select all that apply) | Using strong passwords            | 93.3%  |
|   | Two factor authentication         | 46.7%  |
|   | Regularly updating software       | 70.00% |
|   | Antivirus software                | 56.7%  |
|   | Encrypting sensitive data         | 26.7%  |
|   | Avoiding suspicious links/website | 83.3%  |
|   | Other                             | 3.3%   |

The findings suggest that there has been a consistent and speedy growth, interest, and focus towards integrating technology by our educators in our community.

A sample size comprises of 30 subjects out of which 50% of responses were received from the age group 35 to 44 and 40% from 45 to 55 and 10% from 25 to 34 respectively. The findings shows that maximum of the educators in our communities are also experimenting with innovative ways to teach with the help of ICT tools, as the numbers shows smartphones, laptops, computers and smart TVs are being used frequently.

In context to social media platform Facebook was the number 1 choice, as we have the maximum of respondents from the millennials. These technological advancements are helping educators to reinforce existing pedagogical practices in innovative ways. Use of *Instagram* and *Pinterest* was also found on higher use, which in turn shaping them being into trends with the Alpha generation.

**Table 2: Impact of Tech on community**

| Questions   | Parameters                  | %     |
|---|-----------------------------|-------|
| Do you think technology has improved communication in community?  | Yes                         | 96.7% |
|   | No                          | 3.3%  |
|   | Unsure                      | 0.00% |
| Do you believe technology is an essential part of modern community?   | Yes                         | 93.3% |
|   | No                          | 3.4%  |
|   | Undecided                   | 3.3%  |
| Do you think technology has made communities more or less connected?  | More connected              | 66.7% |
|   | Less connected              | 33.3% |
|   | No Significant Impact       | 0.0%  |
| Which of the following technological advancements have had the most positive impact on our communities? (select all that apply) | Internet                    | 83.3% |
|   | Smartphones                 | 73.3% |
|   | Electric                    | 10.0% |
|   | Medical Advancement         | 60.0% |
|   | Transportation Advancements | 46.7% |
|   | Global Positioning systems  | 46.7% |
|   | Other                       | 3.3%  |

Number of respondents were 96% who gave the importance to tech for it has improved communication in communities. And very few were unsure with the importance.

Communities has seen the ICT revolution in the leading edge. The new technologies of the digital age have been accessible in our everyday life with the guaranteed benefits, so tech has been encouraged as our great living standards. Tech, integrate all communication channels for us to use in our everyday life. ICTs are no longer a luxury for developing countries.

Hence, even our results found that 93.3% of educators responded for having believes towards technology as essential part of our modern community. And only few with no or undecided part.

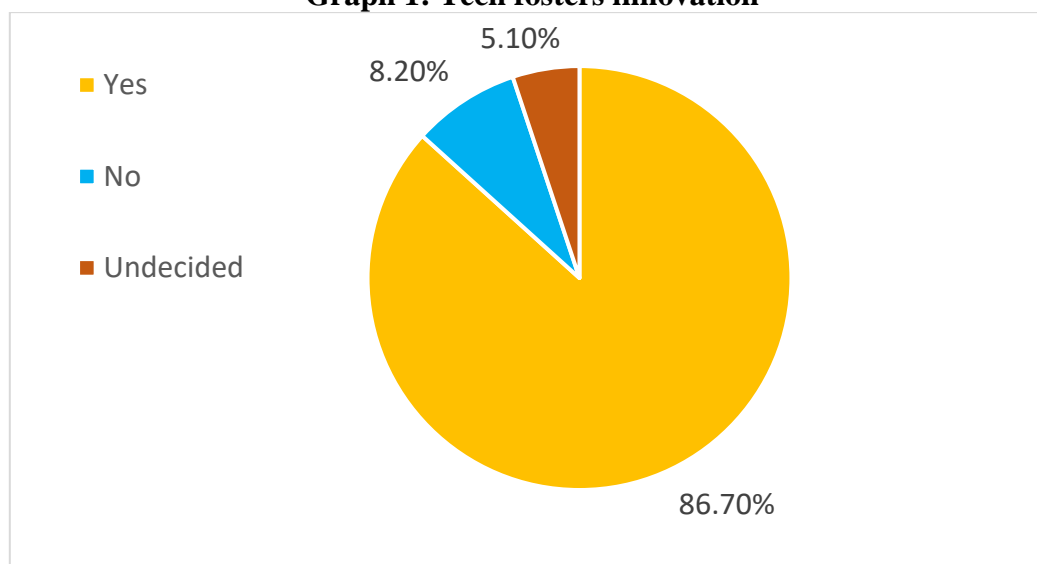
Our findings provide the evidence that the benefits of pervasive connectivity may be undercut when technology supplants social interactions. It even shows that there is a good number of respondents i.e. 33.3% who says that with technology we have now become less connected, but 66.7 saying that yes it has made an impact on more connectivity. Hence, it's crucial to understand the connectivity perceptions.

Technology saw the boom in its usage for the first time during the industrial revolution when the capitalism was on the rise. A plethora of technological advancements take place everyday, so much that it is almost impossible to keep a track of all of them.

The following technological advancements have had the most positive impact on our communities, highest rated by our respondents were Internet and smartphones. And with that we can see the table in which the respondents viewed medical advancements, transportation

advancements and also with global positioning systems. These were the major positive impacts we could find in our community educators.

**Graph 1: Tech fosters innovation**



Graph 1 reveals a very high percent of 86.70% saying tech as fostering innovation, which ultimately giving towards impact of growth and development.

**Table 3: Positive or negative Impact of Tech on community**

| Questions  | Parameters                        | %      |
|--|-----------------------------------|--------|
| Do you think technology has made people more or less productive?                                       | More productive                   | 60%    |
|  | Less productive                   | 36.7%  |
|  | No significant impact             | 3.3%   |
| Do you believe technology has had a positive or negative impact on society?                            | Positive Impact                   | 10.00% |
|  | Negative Impact                   | 6.7%   |
|  | Both Positive and Negative Impact | 83.3%  |
|  | No significant impact             | 0.0%   |
| Which of the following areas to you think technology has made the most impact? (select all that apply) | Education                         | 90.0%  |
|  | Healthcare                        | 76.7%  |
|  | Transportation                    | 63.3%  |
|  | Communication                     | 80.00% |
|  | Entertainment                     | 83.3%  |
|  | Employment                        | 48.78% |
| Environment  | 13.3%                             |        |
| Other  | 0.0%                              |        |

A number of the responder said that digital tools creating them less productive i.e. 36.7% and these tools creating them lazy as there's less possibilities of doing exertions and that they are getting additional hooked into these tools. But at the same time the 60% even saying that it's making us more productive. This study can assist us to investigate with the facts that we are able to bear in mind to create a conclusion regarding digital tools makes us additional productive or less productive.

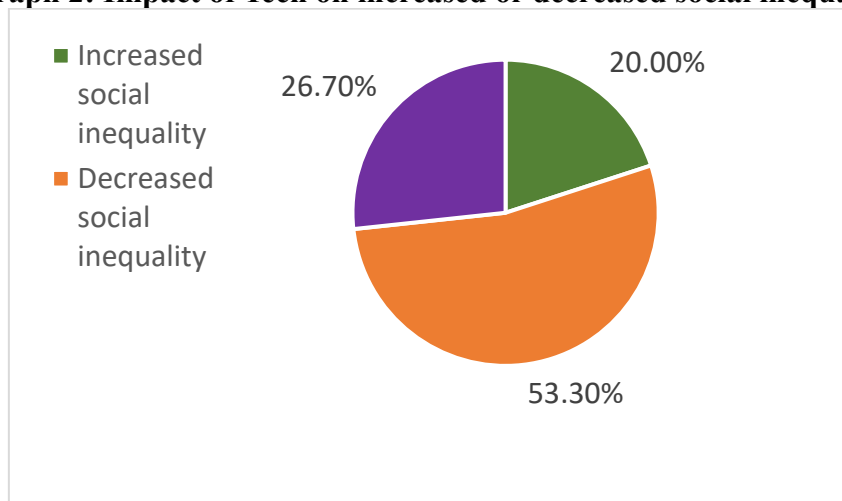
Findings of positive or negative impact on community is very crucial again to understand i.e. 83% responded for both positive and negative impact, which is very important to explore our social and moral implications for the study. Only 10% for positive and 6.7% for negative impact respectively saying about the Technology impact on community.

Areas in which respondents think technology has made the most impact were in highest for Education, entertainment, Communication and then Healthcare. One major benefit of technology in education is the ability for students to access information and resources anytime, anywhere.

**Table 4: Impact of Tech on privacy of the community**

| Questions   | Parameters            | %      |
|---|-----------------------|--------|
| Do you think technology has reduced or increased privacy?   | Reduced privacy       | 66.7%  |
|   | Increased privacy     | 23.3%  |
|   | No significant impact | 10.0%  |
| Do you think technological developments like high tech watches, mini cameras etc. have become a source to cheat in exams? | Positive impact       | 96.7%  |
|   | Negative impact       | 3.3%   |
| Do you believe that in our communities technology is replacing jobs?  | Yes                   | 66.7%  |
|   | No                    | 3.3%   |
|   | Partially             | 30.00% |

**Graph 2: Impact of Tech on increased or decreased social inequality**



Technology effects on every aspect of our life. So, whenever we navigate in Internet, make a phone call, or use different technology tools our privacy becomes vulnerable because technological developments have not only positive sides but also negative ones. In our study also this question has been under the 66.7% of responded as tech reduces the privacy and 23.3% were in favour of that it increases privacy. Only 10% for no significant impact.

Thinking about technological developments like high tech watches, mini cameras etc. have become a great source to cheat in exams was a major concern with respondents.

As it shows drastically high percentage i.e. 96.7% were found to be impacted with the concern of technology has increased the incidences of cheating in exams. In turn again showing social and moral implications to education and upon our community as a whole.

In communities' technology is replacing jobs, implication to this also were found to have 66.7% for it is replacing jobs. And rest for partially in between, i.e. depicting unsurety.

Technology has enhanced productivity, accelerated economic growth, enabled knowledge and information sharing and increased access to basic services. However, it has also been the cause of inequalities, but even found to have decreased social inequality according to our educators as subjects. Our findings, shows the evidence of 53.3% responded to have an impact of tech leading towards decreased social inequality, and 26.7% saying there is no significant impact on our community in this regard, but 20% also saying to have an impact of showing increased social inequality.

Our tool also, made up of wherein we found the various subjective perceptions, with regards to tech usage, influences, drawbacks and in shaping community for future. The evidence shows and helps to get concreted answers in exploring social and moral implication on development.

Technology has influenced our communities in their daily living, in various forms and our research also shows both negative and positive aspects to it as in helping trend settings. New information but provision of too much information is also bad. In working area it has improved the work capacity, sort work in minutes. Helps in business and connecting with clients. Made life easy and beautiful. To a great extent, we are depending on technology for household and professional work, it has changed the daily lifestyle to many folds' extent.

It makes many things easier such as reservation of air and train tickets, research work etc. but at the same time it wastes a lot of time sometimes, especially children waste a lot of time on games.

Responses in detail also showing implications of tech like, saves time and keeps one updated. Technology has made our life more convenient and has also increased our work efficiency. Because of the increased connectivity it has helped us to perform tasks more easily, communicate across vast distances, and access a wealth of information at our fingertips. The benefits are manifold, making our lives more comfortable, productive, and enjoyable.

Opinions in regard to, the drawbacks of technology in our community also gave lot of insight to the research with clarity of thoughts among our educators, it showed the following



responses to think, was that it is time consuming, person is lonelier even though has many friends, personal social disconnect was also found. Hampering privacy, physical and mental health as well social relationship has also reduced. More cheating and frauds and no face-to-face communication was written by our subjects. Mental illness, addiction to entertainment and social media, dependence on technology, are a few important opinions giving by subjects. Also, replacements of personnels due to machines and devices, leading to unemployment.

Less importance to moral values due to advance tech and internet, family life and social life is disturbed. Misuse of technology leading to waste of a lot of time on online games and web search. The students get early exposure to content not meant for children and teenagers. The major drawbacks faced are addiction to these smart gadgets, increased crime rate and deteriorating health.

The answers also revealed that basic human contacts are lost, people have sedentary lifestyle, in-fact more stressful life is pertaining because of constant peer pressure.

Even less use of creativity, unemployment of younger people has increased. The crime rate has also increased due to technology.

Findings in relation to thinking about will technology continue to shape our community/society in the future proves to have implications towards, it would be a world more of artificial intelligence & robotics making us all the lazier and possibly leading us all towards a hazardous lifestyle.

With uncontrolled usage, it will be dangerous, even saying it will upgrade the society and will reduce manual working. Technology will always be a part of life with its merits and demerits. Children will be paying more time to social media, will become less social, will not be curious as easy answer to every matter. According to respondents, tech people will survive and move ahead, rest will have to struggle. It will bring more innovation leading to more efficiency and lifestyle.

The research revealed about, the changes they would like to see in the future regarding the impact of technology on society were even varied but helped us a lot in exploring and reaching us towards our objectives for the research to imply with the thought of using the tech with more and more awareness, so that the negative impacts can be dealt wisely. The following are the guiding responses like, 3D, by saving our kids from the negative impact of technology so that they can spend their life with positive attitudes, more hands on should be promoted rather seeing on internet.

By giving knowledge to people of AI and how to increase productivity with AI instead of avoiding it, limitation on use of technology and to be used only for positive growth and not misleading tasks. Also, technology must not snatch sensitivity and empathy from its users otherwise it will change us to robots and puppets without emotions. Technology must make lives better and not enslave us to a society without a connect.

Technology can be used for the betterment of all sections of the society rather than just focusing on the richer and middle-class society. Helping people to get more opportunities to live a better lifestyle, people should realise it for the ease of routine life but not to replace life.

Integrated digital literacy, transparency in algorithms and data usage to foster trust and accountability, sustainable development rather than exacerbating privacy.

Parents and teachers should make students aware of right use of media, offline projects should be promoted.

Use of technology should be limited, and rules should be made to make sure positive usage of technology which are necessary for the development, people should use it wisely. Furthermore, the answers revealed that, technology is needed for future in all fields, let's use it for the sole purpose of faster work execution but it can never replace actual human touch, emotions, concerns and we should be there for each other in times of need.

This article is also designed to help provide educators with the information they need to identify about best practices to help them to know safely/security measures while using tech. In which we found using strong passwords, avoiding suspicious links/websites and regularly updating software were the highest rated measures used by our community educators and encrypting sensitive data was the least in practice.

## **CONCLUSION**

Our present research concludes with the concept of the relationship between technology and its social and moral implications is multifaceted. Continuous process of intertwining of new forms of communication has also brought new challenges in the processing of personal data. Thereby it is required the constant attention to user's technologies protecting the privacy of potential danger. The way this data is used from different educators leads to the need for better means of protection of personal data. Often people use their personal camera for entertainment purposes or the cultural ones transmitting images in which other people can also be part. What can infringe private life is not their holding in "safe" places, but their distribution in the third persons, online or other without the consent of those persons.

To conclude is by giving knowledge to people of tech and how to increase productivity with the help of tech instead of avoiding it, limitation on use of technology and to be used only for positive growth and not misleading tasks, has given us an insight to become responsible enough, to take a charge of using and practicing technology in a way, that must not snatch sensitivity and empathy from its users otherwise it will change us to robots and puppets without emotions. Technology must make lives better and not enslave us to a society without a connect.

## **LIMITATIONS**

To identify and acknowledge shortcomings/limitations of this research work, here we have pointers to discuss.

When we conduct qualitative research, the inability to generalise the research findings could be an issue that deserves mention.

In my study, data size was small and are typically smaller in qualitative research because, as the study goes on, acquiring more data does not necessarily lead to more information. This is because one occurrence of a piece of data, or a code, is all that is necessary to ensure that it becomes part of the analysis framework.

However, it remains true that sample sizes that are too small cannot adequately support claims of having achieved valid conclusions and sample sizes that are too large do not permit the deep, naturalistic, and inductive analysis that defines qualitative inquiry.

Use of questionnaires, it was found to be a limitation as the willingness of the individuals to respond at all, to respond in a timely fashion, and to respond accurately, can be mentioned.

## REFERENCES

- Bosamia, M. (2013). *Positive and negative impacts of information and communication technology in our everyday life*. [https://www.researchgate.net/publication/325570282\\_Positive\\_and\\_Negative\\_Impact\\_s\\_of\\_Information\\_and\\_Communication\\_Technology\\_in\\_our\\_Everyday\\_Life](https://www.researchgate.net/publication/325570282_Positive_and_Negative_Impact_s_of_Information_and_Communication_Technology_in_our_Everyday_Life)
- Iskandar, D., & Pd, M. (2009). *Metodologi penelitian pendidikan dan sosial (kuantitatif dan kualitatif)*.
- Lowery, T. (2023). *The impact of digital technology on children's social interaction: A literature review*. <https://www.researchgate.net/profile/Teelia-Lowery-2>
- Moleong, L. J. (2000). *Metode penelitian kualitatif*. Remaja Rosda Karya. Bandung.
- Nasution, S. (1996). *Metode penelitian naturalistik kualitatif*. Tarsito. Bandung.
- Poerwandari, E. K. (2007). *Pendekatan kualitatif untuk penelitian perilaku manusia*. LPSP3 Fakultas Psikologi Universitas Indonesia.
- Stephens, B. (2019, May 4). Facebook's unintended consequence. *The New York Times*.
- Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education*, 48, 1273-1296.
- UNCTAD. (2017). *The role of science, technology and innovation in ensuring food security by 2030*. United Nations publication.
- UNCTAD. (2018). *Technology and innovation report 2018*. United Nations publication. [https://unctad.org/system/files/official-document/tir2018\\_en.pdf](https://unctad.org/system/files/official-document/tir2018_en.pdf)
- Wellman, B., & Haythornthwaite, C. (Eds.). (2008). *The internet in everyday life*. John Wiley & Sons.

Younes, M. B., & Al-Zoubi, S. (2015). The impact of technologies on society: A review. *IOSR Journal of Humanities and Social Science*, 20(2), 82-86.